

# **APPLICATION FOR UNITED STATES LETTERS PATENT**

**Title:** GOLF CLUB PUTTER HEAD

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## GOLF CLUB PUTTER HEAD

### Field of the Invention:

The present invention relates to a golf club and more particularly, the golf club putter.

### BACKGROUND OF THE INVENTION

For nearly two centuries, the game of golf has been incorporated into the lives of millions of people all over the world. Ranging from the lands of England to the heartland of America. Golf has provided both a retreat for recreation and the thrill of a world class sport which is played by both amateurs and professionals.

During the past decades, new technology has changes and improved both the ball and the clubs that the players use. Along with changes in ball structure and components, comes the vast enigma of club dynamics and components. Golf clubs range with different angles and effects with each having its own characteristics that improve various

metrics such as swing curve and solid hitting.

The club that is used when the player is relatively close to the hole and more particularly on the green is called the "putter". The green is usually not flat but rather uneven consisting of challenges called slopes and breaks. This produces the difficulty of play on many courses and requires a perfectly shaped shot dictated with the variables of speed and direction. The main purpose of the putter is to hit the ball on the green with as little loft and as square to the ball as possible. The more "square" the hit, the straighter the ball will go with little sidespin. The swing and the eventual hit are caused muscular movements of the putter backwards or "back swing" and then forward in the "follow through." For decades, improvements have been initiated in the putter head and the putter shaft to produce a square hit and a more targeted hit on the "sweet spot" of the putter. The changes to the putter over the years include such changes in the shaft and the putter head. Professionals and amateur players agree that failure to hit squarely on the club face results in a

miss hit or a poor hit and thus, it will not be hit straight.

One of the greatest problems with swinging the putter and to produce a square hit is to reduce the twisting or torque of the club head. In the golf swing, the player tries desperately to keep the club from twisting in the back swing, through impact, and in the follow through. Unequal balance in the club head produce a difficult task to keep the club head square or perpendicular to the ball through the swing. The two focal points are the putter's toe and a heel. Unlike a croquet mallet swing, a player will stand on the side of the putter and consequentially, the player needs to consciously keep the toe from twisting clockwise and or counterclockwise which is produced with unequal weight distribution in the putter head. The weight distribution is directly related to the center of gravity of the putter head. Similar to the game of baseball, one who "chokes" up on the bat creates a different center of gravity on the bat and enables the swinger more control over his swing because there is less freelanced or

uncontrolled movements at the focal points of the bat swing which are the top and the bottom of the bat. However, it is crucial for the player to have a very accurate put to produce a straight aligned hit to make it in a cup. Dramatically, a putter that twists one millimeter in the course of the swing will result in a missed putt.

The result of many miss hit result in a vibration in the head of the putter which travel through the shaft and into the player's hands. Not only is this uncomfortable, but the vibration prevents the association of a clean hit with a good stroke. Vibrations feel "unnatural" and a player's brain does not want to produce or perform things that feel unnatural. Like many sports that involve a club or stick that hits a ball, vibration is inevitable and the less vibration the better the feel of the hit. Further, the better the feel of the hit, the more consistent and proficient the player will become putting.

In the sport of golf, putting while on the green is one of the most critical shots which relies heavily on the

prevention of club twisting before and after impact of the ball. As soon as the twisting starts in the swing, the player cannot change and compensate for the angles that were created. Therefore, there needs improvement on the putter head to reduce this twisting during the swing plane and for the reduction of vibration to procure a solid square hit.

Conventional putters have tried to solve the problem by adding weight to the club head or reconfiguring the shaft of the club or placing the putter head behind the shaft. They have done this by adding weight to the center of the putter head and/or the ends of the putter head. In addition, some putters have a bigger face, or a larger back to decrease the twisting of the club. Further, some inventions involve increasing the length of the shaft of the club to create a "pendulum" effect. An addition, a bend in the shaft has created comfort in the player's stance and thought to reduce the twisting of the club while placing

the head of the putter behind the shaft.

The problems with past inventions are that the center of gravity is not centered and behind the ball due to the fact there is one metal stem from the putter head to the shaft. Also, the stem and hosel are located at the heel of the putter head and not directly over the center of the putter. Further, conventional putters have the putter head behind the shaft of the putter. The club head is not stable because of the unequal weight distribution of weight of the putter head. With these problems, the club has the characteristics of awkwardness and unstableness. Keeping the club head straight and square to the impact of ball has been addressed in many ways by past inventions. But still, there is no effective way to reduce the twisting effectively.

These ways included changing the length and straightness of the shaft of the club by making them longer achieving a different stand and hold. Second the face of the club has be changed by making it bigger with more

surface area. They have attempted to change the weight of the club head distributing weight on both the toe and the heel ends. Third, past inventions have attempted to change the angle on the hosel. All of which have been invented to prevent the the club head from twisting upon the back swing and the forward swing of the club upon impact of the ball. All of which have failed.

Finally, there are no solutions to vibration dampening in the field of golf, especially the putter.

Conventional inventions do not reduce the twisting movement of the putter on the back swing or follow through because Conventional inventions that add weight to the club head toe and heel which cause more twisting. The weights keep the twisting motion in motion and thus, more muscle is needed to resist this temptation.

In the back swing and at the moment of pausing, inertia must start the club head in the forward motion towards the ball. Muscular movements causing the club to

come forward start at the place in which the shaft meets the putter end, which is the closest to the player called "the heel." The motion starts because there is naturally more weight where the shaft intersects the putter head. Consequentially, the heel moves forward first and then the putter head, or the "toe", follows the heel. The angle that is caused by this motion must be countered by muscular movements to offset this by turning the club counterclockwise if you are right handed. This causes the perpetual twisting affect.

Conventional inventions that have a larger face do created a bigger spot for the club to hit the ball or the "sweet spot" but it will not cure a twisting club nor will it provide a more solid hit. As with many new clubs, smaller faces are coming back into the industry since a sweet spot on a smaller object produces a more solid hit since there is a tighter center of gravity. Though a bigger club face creates a larger center of gravity in the front of the club, it does nothing to reduce the twisting.

Finally, inventions that increase the length of the shaft of the club create a pendulum affect to reduce the player's muscular movement, but do not challenge the club head itself. The introduction of clubs that are used against the player's chest as a fulcrum have come into play, however they have no bearing or statistical data to reflect an improvement or a prevention of twisting.

It is therefore an object of the invention to provide a putter for the game of golf.

It is another object of the invention to reduce the twisting of the putter head upon the backswing and follow through and upon impact of the golf ball.

It is another object of the invention to provide a putter head to have two stems that meet at a degree angle above the putter head.

It is another object of the invention to provide a

putter head that has its two stems positioned in the back or rear portion of the putter head.

It is another object of the invention to provide a putter head that hits the ball straight.

It is another object of the invention to provide a putter head that creates a straight and consistent swing pattern.

It is another object of the invention to provide a putter head that does not vibrate when a player hits the ball.

#### SUMMARY OF THE INVENTION

In accordance with the present invention, there is provided a putter head that is connected by two stems from the hosel at an angle which is positioned behind the putter

head so that it reduces the twisting of the putter head upon the impact of a golf ball. Included in this connection of the two stems, there is a connecting piece of material which forms a triangle that acts as a proper distribution of weight and a vibration dampener. The shape resembles the letter "A". The shape of the putter head can have a big or small flat face or can be elongated in the back.

#### BRIEF DESCRIPTION OF THE DRAWINGS

A complete understanding of the present invention may be obtained by reference to the accompanying drawings, when considered in conjunction with the subsequent, detailed description, in which:

Figure 1 is a front view of a putter head.;

Figure 2 is a side view of a putter head.;

Figure 3 is a rear view of a Figure 3 is a rear view  
of a putter head.;

Figure 4 is a front view of a Figure 4 is a front view  
an alternate embodiment of the inventive putter head.; and

Figure 5 is a front view of a Figure 5 is a front view  
of a second alternate embodiment..

For purposes of clarity and brevity, like elements and  
components will bear the same designations and numbering  
throughout the FIGURES.

#### DESCRIPTION OF THE PREFERRED EMBODIMENT

Figure 1 is a perspective view of a Putter Head 15  
in accordance with the invention. The Putter Head 15 may  
be fabricated of metal, plastic, or any other suitable  
material. Moreover, the heel bracket 13, the toe bracket

12, and the vibration stabilizer 14 are located behind and above the putter's face 16. The top of the toe bracket 12 and the heel bracket 13 connect forming the bracket angle 11. This angle is a 90 degree triangle in the preferred embodiment, but in alternate embodiments it can be shaped as any form of angle deemed to be aesthetically or efficiently pleasing to the user. The toe bracket 12 and the heel bracket 13 may be attached to each other and also the Putter Head 15 by gluing, welding, or mechanically fastening in a manner well known to those skilled in the art. The Putter Head 15 may be fabricated from plastic, metal, wood, etc. and may be any shape. The toe bracket 12 and the heel bracket 13 along with the vibration stabilizer 14 function as a vibration dampener and as a larger center of gravity for the club. They provided a larger weight base at the bottom of the club preventing twisting of the said club. Further, the fact that the heel bracket 13, toe bracket 12, and the vibration stabilizer 14 are connected behind the putter head 15 moves the center of gravity behind and above the putter head 15. This allows the putter head 15 to be properly aligned and prevents the putter head

15 from turning or twisting during the course of the swing. Further, the vibration stabilizer 14 provides a more comfortable play when hitting the ball which creates a "soft feel."

The Vibration Stabilizer 14 may be fabricated of metal, plastic, or any suitable material. The vibration stabilizer 14 is attached between the toe bracket 12 and the heel bracket 13 by gluing, welding, or mechanically fastening in a manner well known to those skilled in the art. The vibration stabilizer 14 may be located anywhere between the toe bracket 12 and the heel bracket 13.

The neck angle 10, may be fabricated of metal, plastic, or any other suitable material. For comfort and stability, the neck angle 10 may be at any angle necessary conforming to a person's size and body structure.

Figure 2 is an enlarged view of the putter from the side 17 of the brackets of the Putter Head 15 of Figure 1. Attached to the back of the Putter Head 15 is the toe

bracket 12 and the heel bracket 13. The connectivity of the brackets to the Putter Head 15 can be metal, plastic, or any other suitable material. The angle of the toe bracket 12 and the heel bracket 13 extending from the Putter Head 15 may be at any angle.

Figure 3 is an enlarged view of the putter back 20 of Figure 1. The shaft 18 is connected at the hosel 19. The hosel 19 is connected to neck angle 10.

Figure 4 is a perspective view of an alternate embodiment 21 of the inventive Putter Head 15. Note that in alternate embodiment 21, the toe bracket 12, heel bracket 13 and vibration stabilizer 14, although generally connected to form a shape of a perfect triangle to allow a perfect center of gravity over and behind the head of the Putter Head 15, may be formed as in Figure 4, as an unequal triangle using the Putter Head 15 as the bottom of the triangle. Likewise, the toe bracket 12, heel bracket 13, and the vibration stabilizer 14 in alternate embodiment 21 need not be in a particular measurements but

must be all connected in a triangle form.

Figure 5 is a perspective view of a second alternate embodiment 22 of the invention. Specifically, a second alternate embodiment 22 of the Putter Head 15 is shown having a triangle shape but with the neck angle 10 and shaft 18 past the center point on one side away from the player. Like the first alternate embodiment 21, the second alternate embodiment 21 is shown with a toe bracket 12, heel bracket 13 and vibration stabilizer 14 in an unequal triangle. It should be obvious that any combination of the toe bracket 12, heel bracket 13, and vibration stabilizer 14 triangles can be used, provided the three are all connected at some point.

Thus, in summary, it can be seen what is provided in this invention is a Putter Head 15 that is both functional and decorative. The toe bracket 12, heel bracket 13, vibration stabilizer 14, along with the Putter Head 15, are oriented, in a triangle shape, with the vibration stabilizer 14 connected between the two. There is a

connection of the two brackets at the top by a weld that forms the neck angle 10 and two welds on both ends of the vibration stabilizer 14, and finally two welds that connect the toe bracket 12 and heel bracket 13 to the putter head 15. The neck angle 10 can be any angle and the vibration stabilizer 14 can be at any points between the toe bracket 12 and the heel bracket 13. The vibration stabilizer 14 along with the toe bracket 12 and the heel bracket 13 can be of any material. This triangle shape with the vibration stabilizer 14 is used to create a better center of gravity, provide weight, and to reduce vibrations from off center hits. The neck angle 10 may be changed accordingly to preference in relation to the Putter Head 15, but is angled to some degree to allow a regular conventional putting stroke.

Since other modifications and changes varied to fit particular operating requirements and environments will be apparent to those skilled in the art, the invention is not considered limited to the example chosen for purposes of disclosure, and covers all changes and modifications which do not constitute departures from the true spirit and scope of this invention.

Having thus described the invention, what is desired to be protected by Letters Patent is presented in the subsequently appended claims.

What is claimed is: